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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/996,893 | 11/30/2001 | Eiji Kubo | TAM-101 | 2779 |

7590 05/17/2005

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EXAMINER

CORRIELUS, JEAN B

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2637

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 09/996,893 | Applicant(s) KUBO ET AL. | |
| | Examiner Jean B. Corrielus | Art Unit 2637 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 8 is/are rejected.
- 7) ☒ Claim(s) 2-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/30/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-8 are objected to because of the following informalities: claim 1, line 9, "digital data" should be replaced by "a resulting digital signal" so as to be consistent with subsequent limitation in line 21-22; line 13, "a" should be replaced by "said/the"; line 21, after circuit, "to generate said resulting digital data" should be inserted; line 21, "a" should be "the/said".

Claim 2, line 3, "a" should be "the/said"; line 5, "a" should be deleted; line 5, after signal, "input" should be deleted.

Claim 3, "capable of" should be replaced by "for"; line 3, "a digital" should be "said digital".

Claim 4, line 3, "data" should be "signal".

claim 5, "capable of making an access to" should be replaced by "configured to access". The same comment applies to claim 6, line 2 and claim 7, line 8.

Note that claim 8 is likewise objected to because of its dependency to claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eshmawy et al US patent No. 6,751,203.

Eshmawy discloses a device fig. 1 comprising a digital-signal-processing circuit (encompassed by element 415, 416 and 420); note that the device inherently includes a CPU for controlling the digital-signal-processing circuit; as each DSP includes a CPU; and an interface circuit (encompassed by elements 418) inputting a digital signal and supplying said input digital signal to said digital-signal-processing circuit and outputting digital data processed by said digital-signal-processing circuit (encompassed by element 415, 416 and 420) , wherein said interface circuit includes: an input circuit inputting a digital signal and supplying said input digital signal to said digital-signal-processing circuit (encompassed by element 415, 416 and 420); a gain-adjusting circuit 424 adjusting a gain of said digital signal supplied to said input circuit; and an output circuit 426 adding said digital signal with said signal supplied from said gain thereof adjusted to a digital digital-signal-processing circuit (encompassed by element 415, 416 and 420) and outputting a resulting digital signal. however, Eshmawy does not explicitly teach that the circuit is a semiconductor circuit formed on a single chip. It also fails to teach the signal is supplied and received synchronously with a first clock. However, implementing a circuit in semiconductor using a single chip is old and well known in the art. Given that it would have been obvious to one skill in the art to implement Eshmawy as such so as to be used in small size circuits such as cell phones, where required. In addition, note that at col. 3, lines 52-53, Eshmawy teaches the generation of clock signal for timing and control of operations. Given that, it would have been

obvious to one skill in the art to use the clock signal taught by Eshmawy to control the transfer of signal to from the CPU in synchronously in order to allow proper operation of the device.

As per claim 8, it is well known in the art to execute a command in response to an interrupt signal to request that a specific task be carried out. given that, it would have been obvious to one skill in the art to incorporate such a teaching in Eshmawy in order to allow the processing device to perform a desired task.


Allowable Subject Matter

4. Claims 2-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Maxi-Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-3086. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jean B. Cornelius
Primary Examiner
Art Unit 2637

5-14-05